



## A Renewed Challenge to Anti-criterialism

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### Abstract

In virtue of *what* do things persist through time? Are there *criteria* of their identities through time? Anti-criterialists say no. One prominent challenge to anti-criterialism comes in two steps. The first step is to show that anti-criterialists are committed specifically to the claim that there are no informative metaphysically *sufficient* conditions for identity through time. The second step is to show that this commitment yields absurd results. Each step of this challenge is open to objection. However, in what follows, I will reformatify this challenge to anti-criterialism by offering new reasons to take each step.

Some things that exist today will exist tomorrow. They may change, sure, but they'll keep right on existing. The question is: How? In virtue of *what* will they persist through time? Are there *criteria* of their identities through time?

Anti-criterialists say no, there aren't any criteria of identity through time. They grant that things persist, but then insist that there are no informative metaphysically necessary and sufficient conditions for their persistence.

One prominent challenge to anti-criterialism comes in two steps. The first step is to show that anti-criterialists are committed specifically to the claim that there are no informative metaphysically *sufficient* conditions for identity through time. The second step is to show that this commitment yields absurd results.

Each step of this challenge is open to objection. Indeed, each step has been objected to. However, in what follows, I will redouble this challenge to anti-criterialism—thus providing a *renewed* challenge to anti-criterialism—by offering new reasons to take each step. I'll thus widen a breach that some have sought to shore up.

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## 1 Anti-criterialism

Again, anti-criterialism is the view that there are no criteria of identity through time, where a criterion of identity through time is a set of informative metaphysically necessary and sufficient conditions for identity through time.

Anti-criterialism applies to *any* object's identity through time. However, it is typically asserted in the context of a more specific debate—namely, the *personal* identity debate. So in what follows I will focus on anti-criterialism as applied to people like you and me. And I will treat anti-criterialism as the view that there is no criterion of personal identity through time—or, as I will put it, there is no criterion of personal *persistence*.

To count as a criterion of personal persistence, the obtaining of some conditions must be metaphysically necessary and sufficient for any person's persistence through time (for the sake of ease I'll just say 'necessary and sufficient'—the 'metaphysically' will be implied). And these conditions must also be *informative*. One way an alleged criterion can be *uninformative* is by presupposing the identity of the person in question. For example, if I assert that person P at time t is identical to person P\* at time t\* if and only if P is *the same person* as P\*, then although I have given a necessary and sufficient condition for personal persistence, I haven't given a criterion of personal persistence, since my condition isn't informative. If instead I assert that P at t is identical to P\* at t\* if and only if *it is snowing in Alaska from t to t\**, then I have given an informative condition for personal persistence—it doesn't presuppose anyone's identity through time, for example—but I haven't given a criterion of personal persistence, since my condition isn't necessary and sufficient for personal persistence. Hence, to count as a criterion of personal persistence, the conditions on offer must be both informative and also necessary and sufficient for personal persistence.<sup>1</sup>

Many philosophers are *criterialists*. That is, they contend that there *is* a criterion of personal persistence. Some of these philosophers claim that a certain form of mental continuity is necessary and sufficient for personal persistence. On such a view, a person P persists from time t to time t\*—that is, P at t is identical to P\* at t\*—if and only if P at t has the relevant mental connections with P\* at t\*. Others claim that it's physical or biological continuity that is necessary and sufficient for personal persistence. They say that P at t is identical to P\* at t\* if and only if P is physically or biologically continuous in the relevant way with P\*.<sup>2</sup> But what unites all of these philosophers is the belief that there is a criterion of personal persistence.

Anti-criterialists, on the other hand, deny this. They don't deny that people persist through time. They just deny that there are any informative necessary and sufficient conditions for personal persistence. Joseph Butler (1736/2008) and

<sup>1</sup> It's worth emphasizing that I am not using 'criteria' in an *epistemic* sense. That is, I am not talking about conditions under which we could *know* that a person has persisted through time. Rather, I am talking about conditions under which a person persists through time, regardless of whether we can know it or not.

<sup>2</sup> Shoemaker (1985), Noonan (2003), Dainton (2008) and Strawson (1999) hold versions of the mental view. van Inwagen (1990) and Olson (2007) hold the biological view.

Thomas Reid (1785/2008) were early defenders of this view.<sup>3</sup> But Madell (1981) Merricks (1998), Chisholm (1976), Swinburne (1985), Lowe (2009), Langsam (2001), and Langford (2017) have since taken up their mantle. These philosophers all agree that although people persist through time, there are no informative necessary and sufficient conditions for personal persistence. That is, there is no *criterion* of personal persistence. Hence, they are *anti-criterialists*.

According to anti-criterialists, many alleged criteria of personal persistence are *uninformative*. Recall, one way an alleged criterion of personal persistence can be uninformative is by presupposing the identity of the person in question. To use an earlier example, if a criterialist claims that P at t is identical to P\* at t\* if and only if P\* is *the same person* as P, then her alleged criterion of personal persistence is uninformative. Or, perhaps less obviously, the claim that P at t is identical to P\* at t\* if and only if P\* has *genuine* memories of P's experiences at t might also be uninformative, and thus, not a criterion of personal persistence. For if by 'genuine memories' one means to assert that the memories which P\* believes are of her experiences at t really are of *her* experiences at t, then of course P\* at t\* is identical to P at t if P\* has the genuine memories of P. But that's only because 'genuine memories' is defined in terms of the identity of the person whose memories they are (cf., Merricks 1998). So this alleged criterion assumes the identity of the person in question. Thus, it is uninformative. To move beyond examples, we can say that an alleged criterion of personal persistence is uninformative in this way if it either explicitly has the persistence of the person in question as a condition for her persistence (e.g., 'is the same person as') or contains a component that is analyzed in terms of her identity such that her persistence is implied by the alleged criterion simply in virtue of the analysis or definition of that component (e.g., 'genuine memory'). Uninformativeness in this sense is thus akin to circularity in a definition or argument (see, e.g., Lowe 2009, p. 137; Noonan 2003, §1.5, 3.5; Shoemaker 1985, pp. 80–81).<sup>4</sup> And proposing this kind of uninformative criterion of personal persistence is a mistake that anti-criterialists accuse many criterialists of making (e.g., Merricks 1998; Swinburne 1985).

But anti-criterialists do not claim that this is the only mistake that criterialists can or do make. Anti-criterialists typically grant that some criterialists provide informative persistence conditions. But they claim that all such conditions are

<sup>3</sup> Butler and Reid put their claim in terms of their being no *definition* or *analysis* of personal identity. This is a common way for those in Butler and Reid's tradition to express the claim that there is no criterion of personal persistence (see, e.g., Swinburne 1985, p. 20; Gasser and Stefan 2012; Kanzian 2012; Langsam 2001, p. 251). And yet, this talk of analysis is not entirely without controversy (see, e.g., Merricks 1998). So in what follows I will stick with the claim that there is no criterion of personal persistence.

<sup>4</sup> It is natural to think of informativeness as *epistemic* in nature. However, given that criteria of personal persistence are themselves *metaphysical*, not epistemic—that is, they are conditions under which people persist through time, *whether or not we know it* (see fn. 1)—I think it's more plausible to say that whether an alleged criterion is informative in the present sense isn't really a matter of whether it gives us any knowledge about a person's persistence; rather, it is a *metaphysical* (or perhaps logical) matter having to do with whether personal persistence is given as a condition for its own obtaining. That said, none of my arguments turn on this point (just keep in mind that the criteria for personal persistence themselves are metaphysical, not epistemic).

either unnecessary or insufficient for personal persistence. Take spatial continuity, for example. This potential criterion is informative. But it's arguably not *sufficient* for personal persistence, since a person could die and thus be spatially continuous with a corpse, and yet, not persist as a corpse.

And anti-criterialists claim that a similar story can be told for *any* alleged criterion of personal persistence. That is, anti-criterialists claim that any potential criterion—regardless of whether it has been proposed, defended, or even mentioned—will be uninformative, unnecessary, or insufficient for personal persistence.

That's what anti-criterialists *say*. But what's their *motivation* for the view? One motivation for anti-criterialism is, as I've been suggesting, the purported failure of all alleged criteria of personal persistence. But that's not all. So, before moving on, I want to briefly outline three other key motivations for anti-criterialism.

The first is Merricks' (1998) argument from *modal coincidence*. Merricks starts by pointing out that if criterialism is true, then "the obtaining of one [contingent] state of affairs (O at t's being identical with O\* at t\*) is broadly logically necessary and sufficient for the obtaining of a distinct [contingent] state of affairs (O at t's satisfying the criterion C with O\* at t\*)" (p. 116). This means that one contingent state of affairs is *necessarily connected* with another distinct, contingent state of affairs—every possible world in which one obtains, the other does too. Then Merricks claims that this necessary connection is odd—a striking modal coincidence—and argues that we shouldn't believe in such coincidences unless we have compelling reason to do so. He says:

... we ought to assume, for any distinct and contingent states of affairs S and S\*, either that S can obtain in some possible world where S\* does not obtain or vice versa, unless there is *some* reason to think otherwise ... This is a reasonable assumption, and I think it is presupposed by a great deal of our reasoning about what is broadly logically possible (pp. 117–118).

There's more to say about Merricks' (1998) argument from modal coincidence. But Merricks' key point, which will suffice for my purposes, is just that criterialism should be abandoned because it requires accepting something that we should reject—namely, necessary connections between certain distinct, contingent states of affairs. Merricks' argument from modal coincidence is thus one key motivation for anti-criterialism.

The second such motivation is the argument from *fission*. The idea is this. There are possible cases in which a person undergoes fission—is split in two—and the physical and/or mental connections that obtain between the pre-fission person and the post-fission people are enough to commit any criterialist to the absurd conclusion that, in such cases, the one pre-fission person is identical to each of the two non-identical post-fission people. This is one common objection to criterialism (see, e.g., Swinburne 1985; Merricks 1998; Gasser and Stefan 2012, pp. 10–11; Noonan 2003). And so it's another key motivation for anti-criterialism.

The third such motivation is the argument from *graduality* (see, e.g., Noonan 2003; Parfit 1984, p. 213; Gasser and Stefan 2012, pp. 8–10). This argument begins with the observation that the connections featured in many proposed criteria of

personal persistence *admit of degrees*—that is, they may hold to a greater or lesser extent. But, the argument continues, personal persistence does not admit of degrees—in any given circumstance, you either persist, or you don't. So criterialists are stuck with the implausible claim that, although the connections featured in their proposed criteria admit of degrees, there is a precise point at which those connections are just strong enough for a person to persist. And so we have yet another key motivation for anti-criterialism.

The above may not be the only motivations for anti-criterialism. But they are especially prominent, and (apparently) especially compelling. However, they are not decisive. For there are also compelling reasons to *reject* anti-criterialism. To show this, I'll now turn to one prominent argument against anti-criterialism.

## 2 Against Anti-criterialism: Step 1

In “A Challenge to Anti-Criterialism” (2014), I argue that anti-criterialism is false. My argument has two main premises. The first is that anti-criterialists are committed specifically to the claim that there are no informative *sufficient* conditions for personal persistence. The second is that this commitment leads to absurd results. In this section I will discuss the first premise; in the next section I will discuss the second. What I will do in each case is (a) briefly lay out my initial reasons for believing the premise in question, then (b) lay out (potential or actual) objections to those reasons, and, finally, (c) respond to the objection. In the course of dealing with (c), I will give completely new reasons to accept the premise in question. And these reasons will turn out to be especially compelling, in part because they strike at the very heart of anti-criterialists' most important motivations.

On to the first premise. I'll put it this way:

- (1) Anti-criterialists are committed to there being no informative metaphysically *sufficient* conditions for personal persistence.

My first reason for believing (1) is that, as a matter of fact, almost all actual anti-criterialists defend it. They thus commit *themselves* to the claim that there are no informative sufficient conditions for personal persistence. Swinburne (1985), for example, accepts that there are some informative necessary conditions for personal persistence (e.g., having certain mental capacities; see, p. 26), but he argues that informative conditions such as those involving brain or memory continuity are “not enough to ensure personal identity” (p. 22). Langsam (2001), who also defends anti-criterialism, similarly writes, “According to the [anti-criterialist], the existence of a self is a further fact, a fact not logically implied by any of the facts adduced by [criterialists]” (p. 256). These are just two examples. There are others.<sup>5</sup> So one

<sup>5</sup> For example, Shoemaker (2002) writes, “So the non-reductionist [i.e., anti-criterialist] believes that even when we have gathered all the facts together regarding the body, brain, and experiences of the person in question, we still do not have the key further fact necessary to determine questions of identity” (p. 146). See also Lowe (2009, p. 139), Parfit (1984, p. 309), Chisholm (1976, p. 111), and Eklund (2004). These philosophers say things that *suggest*, but do not entail, that anti-criterialists' view is that there are no informative sufficient conditions for personal persistence.

reason to believe that anti-criterialists are committed to there being no informative sufficient conditions for personal persistence is that, in fact, most (if not all) anti-criterialists accept that commitment. They commit *themselves* to it.

But this reason is inconclusive, and perhaps temporary. That anti-criterialists in fact defend the above claim does not imply that they *have to*, or even that they *should*. And, indeed, there has been some recent interest in (if not unreserved defense of) anti-criterialist claims other than what's expressed in (1) (see, e.g., Merricks 2001; Langford 2017). So my argument for (1) shouldn't rest *just* on its fit with actual trends.

And it doesn't. My second reason for believing (1) derives from paying attention to, and subsequently narrowing, anti-criterialists' viable options. The claim of anti-criterialism is that there are no (metaphysically) necessary and sufficient conditions for personal persistence. So here are anti-criterialists' options:

- (i) There are no informative *necessary* conditions for personal persistence.
- (ii) There are no informative *sufficient* conditions for personal persistence.
- (iii) There are informative necessary conditions for personal persistence and there are informative sufficient conditions for personal persistence, but there are no informative conditions that are *both* necessary and sufficient for personal persistence.

Anti-criterialists have to accept one or more of (i)–(iii). I claim that anti-criterialists are committed to (ii). And my (present) reason for this is that (i) and (iii) are not viable options. So anti-criterialists are left with (ii).

I won't go into great detail on this point, because I've done so elsewhere (see Duncan, 2014). But here's the short of it. First, every anti-criterialist should reject (i). And they do. For clearly there are informative necessary conditions for personal persistence. Here's one: In order for me to persist until tomorrow, the universe (along with everything of every kind in it) mustn't be annihilated before then. Here's another: I can't become a cardboard box. So (i) is false.

My reason for rejecting (iii) is a little more complicated. The central point is that, if one has a good reason for thinking that some informative condition is *sufficient* for personal persistence, then one also has a good reason for thinking that that condition is *necessary* for personal persistence as well. In which case one should reject (iii). To see this, pick any condition that is a contender for being sufficient for personal persistence—biological continuity, let's say. Why would one think that biological continuity is (metaphysically) sufficient for personal persistence? Well, presumably because one thinks that biological entities are *what we are* in some fundamental sense. But if that's the case, then one should also think that biological continuity is *necessary* for personal persistence. For we can't fail to be what we are fundamentally. So this yields a dilemma: Either we are fundamentally biological entities, or we aren't. If we are, and if biological continuity is thus held to be sufficient for personal persistence, then biological continuity should also be held to be necessary for personal persistence. If, on the other hand, we are not fundamentally biological entities, then there's no obvious, good reason to think

that biological continuity is sufficient for personal persistence. The same goes for any other remotely plausible condition for personal persistence.

There's of course more to say here. But, again, I won't go into great detail, because I've done so elsewhere (see Duncan 2014). The point is just that if one's accepts that some condition is *sufficient* for personal persistence, then one should also accept that it's *necessary* for personal persistence. In which case one should reject (iii).

Some object to this argument. Langford (2017), for example, pushes back by saying that I've unfairly stacked the deck by choosing biological continuity as my example of a plausible informative sufficient condition for personal persistence. Langford says that the kind of informative condition that anti-criterialists *should* say is sufficient for personal persistence is something more like: biological continuity *together with a relevant contingent law holding*. Langford first introduces this idea while talking about Tibbles the cat:

... there may be worlds with *contingent laws* whereby having a biological continuer (with no-branching, perhaps) *guarantees* Tibble's survival. Consequently, having a biological continuer *together with the holding of some such law* yields a metaphysically sufficient condition for Tibble's survival (p. 3).

Langford then uses this idea to respond to my (Duncan 2014) argument, in which I appealed to a fictional person named 'Sam':

... according to the anti-criterialist view being defended, having a biological continuer is *not* metaphysically sufficient for Sam's persistence. At best, having a biological continuer *together with a relevant contingent law holding* (i.e. one which glues Sam's persistence to biological continuity) is metaphysically sufficient for his persistence. This difference is important. The latter sufficiency condition tells us little about what kind of entity Sam is essentially ... [A defender of this view] agrees with Duncan (2014), then, we may suppose, that if biological continuity *on its own* were metaphysically sufficient, that would suggest Sam is essentially a biological entity. However, she accepts that having a biological continuer *together with the holding of the kind of contingent law mentioned* is metaphysically sufficient for his persistence (p. 4).

Langford then argues that, because this latter condition tells us little about what we are essentially, accepting that it is sufficient for personal persistence does not put any pressure on anti-criterialists to also accept that it is necessary for personal persistence. So Langford concludes that this is a good way for anti-criterialists to defend (iii).

I disagree. I don't think it's a good way to defend (iii). Why? Very briefly: Because it requires positing brute, contingent laws that govern facts about personal identity. What are these laws? How is it that they interact with facts about biological continuity, for example, to yield facts about personal persistence? This strikes me as ad hoc, mysterious, and unlikely. Plus, in virtue of bringing these contingent laws on board, this strategy yields a view about personal identity that is decidedly less simple than its competitors. Furthermore, it yields the false result that facts about

our persistence are grounded in facts (about laws) that are *extrinsic* to us. As many philosophers have carefully argued, whether or not I persist in any given scenario has to be solely grounded in facts that are *intrinsic* to me. All that matters for my identity in and through time is what's going on *here*, with me. But Langford's defense of (iii) runs afoul of that claim.

But set all of that aside. I don't want to get too hung up on defending my (Duncan 2014) argument against Langford's objection. Readers can assess that dialectic for themselves. Instead, I want to offer a completely new reason for rejecting (iii). Specifically, I want to offer a new reason for thinking that anti-criterialists are committed to there being no informative sufficient conditions for personal persistence. In other words, I want to offer a new reason for thinking that (1)—the first premise in my argument against anti-criterialism—is true.

That reason is this: Accepting that there are informative sufficient conditions for personal persistence *undermines the motivations for anti-criterialism*. Indeed, it undermines almost *all* of the key motivations for anti-criterialism mentioned earlier. So to accept (iii), and thus reject (1), is to rid anti-criterialism of its rationale.

Take Merricks' argument from modal coincidence. Merricks (1998) argues that criterialism entails something we should reject—i.e., necessary connections between distinct, contingent states of affairs. But if anti-criterialists were to accept (iii), and thus were to accept that there is an informative sufficient condition for personal persistence, then they'd be subject to the same objection—they'd be hoist by their own petard. For if there is a sufficient condition for personal persistence, then every world in which that condition obtains between person P at time t and person P\* at time t\* is a world in which P and P\* are identical.<sup>6</sup> So if there is a sufficient condition for personal persistence, then there is a necessary connection between distinct, contingent states of affairs. Same bad result. So if anti-criterialists accept that there is an informative sufficient condition for personal persistence, then their advantage over criterialists regarding modal coincidence will disappear. They will thus undermine one of the key motivations for their view.

Now take the argument from fission. Anti-criterialists say that there are possible cases in which a person undergoes fission, and the physical and/or mental connections that obtain between the pre-fission person and the post-fission people are enough to commit any criterialist to the absurd conclusion that, in such cases, the one pre-fission person is identical to each of the two non-identical post-fission people. This is one of the *main* motivations for anti-criterialism. But notice, if anti-criterialists were to accept that there is an informative sufficient condition for personal persistence, then they would be subject to the same objection. For if fission is possible, and if the continuity that could be doubly maintained throughout fission is sufficient for personal persistence, then a single pre-fission person would be identical to two non-identical post-fission people.<sup>7</sup> Same bad result. So if anti-

<sup>6</sup> This is true regardless of whether that condition is something like biological continuity, or something more like biological continuity plus the holding of a contingent law. Either way, there is a necessary connection between two contingent states of affairs—namely, P at t's being identical with P\* at t\*, and P at t's satisfying the sufficient condition C with P\* at t\* (cf. Merricks 1998, p. 116).

<sup>7</sup> Again, this is true regardless of whether that condition is something like biological continuity, or something more like biological continuity plus the holding of a contingent law. For if fission (in biology,

criterialists accept that there is an informative sufficient condition for personal persistence, then their advantage over criterialists regarding fission cases will disappear. They will thus undermine one of the key motivations for their view.

Now take the argument from graduality. This argument begins with the observation that the connections featured in many proposed criteria of personal persistence *admit of degrees*—that is, they may hold to a greater or lesser extent. But, the argument continues, personal persistence does not admit of degrees—in any given circumstance, you either persist, or you don't. So criterialists have to defend the implausible claim that, although the connections featured in their proposed criteria admit of degrees, there is a precise point at which those connections are just strong enough for a person to persist. That's the objection. But, notice, this very same objection also applies to anti-criterialists who accept that there is an informative sufficient condition for personal persistence—that is, as long as that condition admits of degrees (and presumably it would). So, once again, if anti-criterialists accept that there is an informative sufficient condition for personal persistence, they will thereby undermine one of the key motivations for their view.

The above arguments from modal coincidence, fission, and graduality are three of the most important motivations for anti-criterialism. But if anti-criterialists allow that there are informative sufficient conditions for personal persistence, they'll lose them as motivations. They will be left with little else, motivation-wise, besides their dissatisfaction with the going criterialist positions.<sup>8</sup> And that's not much to go on.

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Footnote 7 continued

say) is possible, then surely it is possible in worlds which there is a contingent law governing personal persistence. One might suggest that this law comes with a no-branching rule (How convenient! Cf. Langford 2017, p. 3). But that sort of move is equally available to criterialists in response to fission cases (see, e.g., Shoemaker 1985). So invoking it wouldn't help anti-criterialists regain their advantage over criterialists when it comes to fission.

<sup>8</sup> One other motivation for anti-criterialism, which I haven't discussed here mostly because it hasn't seemed to catch on among anti-criterialists, is Lowe's (2012) argument from *fundamentality*. This motivation would also be undermined if one were to accept that there are informative sufficient conditions for personal persistence. The argument goes as follows. Lowe claims that persons are *fundamental* ontological entities (I won't go into his argument for this claim, since it's not important for my purposes.). Then he says that "if persons really are *fundamental* in our ontological scheme ... we should probably conclude that personal identity is primitive and 'simple,' in the sense that nothing more informative can be said about identity of persons than that in some cases it just *obtains* and in others *not*" (p. 152). That's the argument. But if one accepts that there are informative sufficient conditions for personal persistence, then, *contra* Lowe, one accepts that something more informative *can*, in fact, be said about the identity of persons than that in some cases it just obtains and in others not. So then one has to either deny that persons are fundamental, or deny Lowe's inference from fundamentality to primitiveness (primitiveness being what Lowe takes to entail anti-criterialism). Either way, Lowe's argument from fundamentality is undermined.

Lowe (2009) also gives an argument from the claim that persons are fundamental to the claim that all alleged *psychological* criteria of personal persistence are uninformative (or circular). Since this argument also depends on the claim that persons are fundamental, it would also be undermined (in the same way as above) if one were to accept that there are informative sufficient conditions for personal persistence. Perhaps another version of this argument could be developed without the claim that persons are fundamental—as I've said, the purported failure of various alleged criteria of personal persistence to be informative is a motivation for anti-criterialists. However, two further points need to be kept in mind. First, the claim that this or that alleged criterion of personal persistence is uninformative is not enough, on its own, to establish the wholly general anti-criterialist claim that there are absolutely *no* (informative) criteria of personal persistence. Further motivation is needed. And, as I've argued, that further motivation

So it behooves anti-criterialists to *deny* that there are informative sufficient conditions for personal persistence. Thus, they should accept the first premise in my argument against their view—i.e., (1).

### 3 Against Anti-criterialism: Step 2

The first premise in my argument against anti-criterialism, which I just defended, is that anti-criterialists are committed to there being no informative sufficient conditions for personal persistence. The second premise is this:

- (2) Commitment to there being no informative sufficient conditions for personal persistence commits one to absurd results.

My initial argument for (2) starts with Sam, who is a perfectly normal person. Suppose that all of the psychological, phenomenal, physical, biological, and other qualitative (i.e., non-identity-assuming) connections present in a normal persisting person, connect Sam at time  $t$  with ‘Sam\*’ at a later time  $t^*$ . Sam and Sam\* are continuous with respect to all relevant psychological connections—memory, cognition, personality, etc. They are also phenomenally continuous—a single, unbroken phenomenal stream connects them. They are also continuous with respect to all of the biological and physical connections normally present in a persisting person. And the same goes for any other such qualitative connections.<sup>9</sup> Finally, the connections between Sam and Sam\* are *non-branching*. Sam and Sam\* are continuous *only* with each other. Thus, in sum, Sam is just like a normal person in every qualitative way, both in time and through time. According to any plausible criterion of personal persistence, Sam and Sam\* are the same person.

Now suppose that there are no informative sufficient conditions for personal persistence. Then the obtaining of all of the non-branching psychological, phenomenal, physical, biological, etc., connections between Sam and Sam\* does not imply that Sam is the same person as Sam\*. Because *ex hypothesi* there are no informative sufficient conditions for personal persistence, the obtaining of the conditions in question is insufficient for Sam’s persistence. There is a *further fact* about whether Sam persists from  $t$  to  $t^*$ . Sam might persist over that interval, but it is possible that he does *not* persist from  $t$  to  $t^*$ . Thus, there is possibly a being (or

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Footnote 8 continued

is seriously diminished, if not completely undermined, if one denies (1). Second, even if one were to argue that *all* reasonable contenders for criteria of personal persistence are bound to be uninformative, thus supporting the general anti-criterialist claim, that conclusion would be in tension with the claim that some sufficient conditions for personal persistence are in fact informative. So, again, denying (1) thoroughly undermines the motivation for anti-criterialism.

<sup>9</sup> This can even include *non-physical* qualitative connections if you are so inclined. That is, if you are inclined toward some form of dualism—even substance dualism—then also suppose that all of the qualitative non-physical connections present in a normal persisting person connect Sam and Sam\*. Some philosophers seem to assume that there is no such thing as qualitative continuity in a non-physical substance—that, in principle, nothing informative can be said about the persistence of a non-physical substance such as a soul. But, as I’ve argue (see Duncan 2017), there’s actually no good reason to accept this assumption, and, indeed, there are good reasons to reject it.

series of beings) that is qualitatively just like a single persisting person in every way except that he does not persist. So it's possible that every qualitative connection that normally obtains in a persisting person obtains over some interval without the person in question persisting over that interval.

I contend that this result is absurd. It's absurd to think that Sam could be just like a normal persisting person *in every single qualitative way* and yet not be a persisting person.<sup>10</sup> If such things were possible, then you or I could be in Sam's shoes. For anti-criterialism is a fully general view about personal persistence. If anti-criterialism is true, then no amount of qualitative continuity of *any* kind is sufficient to guarantee *any* person's persistence through *any* period of time. Thus, if anti-criterialism is true, then it's possible that you will be unable to finish reading this paper, not because you are bored or distracted, or because your mental or physical capacities are about to break down or divide, but because you will simply and inexplicably fail to persist. And it's also possible that you *just now* came into existence, even though your mind and body have existed for years. This result, which is generated by the idea that there are no informative sufficient conditions for personal persistence, is unacceptable. It's absurd. Hence, I contend that (2) is true.

But there's a worry with this argument. One might ask: Absurd how? That is, in what sense is the possibility of Sam failing to persist truly *absurd*? There's no obvious *contradiction* in it. So it's not absurd in that sense. The worry, then, is that I haven't actually shown that Sam's case is absurd, and so I haven't shown that (2) is true (cf. Langford 2017, §3).

My reply is that there are various senses of 'absurd', and the possibility of Sam failing to persist is absurd in several of those senses. Whether or not it entails a contradiction, the possibility of Sam failing to persist in the above case is (grab your dictionary): wildly unreasonable, preposterous, ridiculous, laughable, harebrained, and cockamamie. It is also counterintuitive (cf. Shoemaker 2012, p. 126), it offends common sense, and it is "too wild to countenance as a possibility" (Zimmerman 1998, p. 293). In those senses, it's absurd.<sup>11</sup>

But, with that said, I'm now going to concede the point. For I don't want to fight over a word (i.e., 'absurd'). And I don't want to mislead anyone. So instead of defending (2)—a claim about what's *absurd*—I'll defend the following:

- (2') Commitment to there being no informative sufficient conditions for personal persistence commits one to *false* results.

Anti-criterialism yields *false* (rather than *absurd*) results. That'll do for my purposes. So now the question is whether (2') is true. Given Sam's case, I think it's already obvious that (2') is true. So we *could* just leave it at that. Nonetheless, in

<sup>10</sup> In fact, we can go even further. We might just suppose that all of the qualitative facts that have anything to do with Sam remain fixed from  $t$  to  $t^*$  so that Sam and Sam\* are qualitatively indistinguishable. We might even suppose that the entire universe remains qualitatively fixed from  $t$  to  $t^*$ . In this scenario, it is even more absurd to think that Sam could possibly fail to persist from  $t$  to  $t^*$ .

<sup>11</sup> Keep in mind that I'm not saying *every* implication of anti-criterialism is absurd, or that the absurdity of anti-criterialism is revealed in every kind of case. There are some cases other than Sam's case in which anti-criterialism may not seem absurd. My claim here is just that the possibility of Sam failing to persist in the above case is absurd. Which is all it takes to establish (2).

what follows, I will lay out four reasons to accept (2'). Some of these reasons have already been canvassed (or at least alluded to) in the literature on anti-criterialism. But my discussion will culminate with a completely new reason to accept (2')—one that I believe is especially compelling.

But first things first. The first reason to accept (2') is that the possibility of Sam failing to persist is *deeply counterintuitive*. I don't know how hard to press on this point, as there's more than a little controversy regarding the evidential weight of intuitions. But insofar as one's reasoning about personal identity involves weighing one's intuitions in light of possible cases, one should take note of how counterintuitive it is that Sam possibly does not persist in the above case, and one should count this as at least *some* evidence for (2').

The second reason to accept (2') is that the possibility of Sam—or you, or me, or anyone else—failing to persist in a case like the one described above undermines our justification for our everyday beliefs about our persistence. Sydney Shoemaker (2012) states a version of this objection, but as applied to *trees*, as follows:

I observe over a period of time what I take to be a tree growing in my yard, and what accounts for what I observe is the impact on my sensory system of a series of instantiations of tree properties whose members stand in precisely the sorts of causal relations that obtain among the property instances in the career of a growing tree. But on [anti-criterialism], apparently, it is compatible with what I seem to observe in such a case that the series of property instances is not the career of a tree. What more could I observe, or otherwise establish, that would show me that there really was a single tree persisting throughout that interval? It is hard to see how on this view we could have any justified beliefs about the persistence of trees through time (p. 126; see also Zimmerman 1998, pp. 292–293).

What goes for trees goes for people. If there are no informative sufficient conditions for personal persistence, then Sam's case, in which he fails to persist despite having all of the qualitative features of a normal persisting person, is possible. So are innumerable other cases involving you, me, and other people. This seems to undermine our justification for our everyday beliefs about ourselves and our persistence through time. How could we know who is who, or whether this or that person is still among us? Our rationale for such beliefs comes from our sensory awareness of our properties in and through time. And yet, on anti-criterialism, the instantiation of these properties doesn't ground our persistence through time. So our awareness of them is not sufficient to justify the conclusions that we readily draw about our identities. This is a surprising result. Or, rather, it is a *false* result. For *we know who's who!* Thus, this is another reason to accept (2').<sup>12</sup>

<sup>12</sup> Langford (2017) responds to this objection by saying that simplicity and other theoretical considerations justify the belief that a contingent law governs *actual* persistence facts, and this, in turn, justifies our generalizations about our persistence. But if one is motivated by simplicity considerations (or other theoretical considerations), then one should just ditch this contingent law (the positing of which I've already criticized in Sect. 2) and say that our generalizations about our persistence are justified by our perception of the qualitative features that appear to ground our persistence. Which means one should accept criterialism.

One might respond that our everyday beliefs about our persistence through time remain justified, because it's only in very unusual cases—such as fission—that the persistence facts come apart from the qualitative facts mentioned above. But this response is not available to anti-criterialists. For they are committed to their being *no* informative sufficient conditions for our persistence. This means that even in very ordinary, truly banal cases, continuity in all of the qualitative features of a normal persisting person does not guarantee personal persistence. Forget fission. Even in ordinary cases it's possible that we fail to persist. Hence, we can't know that we persist. Which is false. We *do* know that we persist! Hence, (2') is true.

A related (third) reason to accept (2') is that if we admit that cases like Sam's are possible, then the entire personal identity debate, of which anti-criterialism is a part, begins to look suspect, and the legitimacy of any view within it, including anti-criterialism, becomes doubtful. This debate arises when we think about apparently self-evident facts such as that we persist through change, or that there are some changes we can survive but others we can't. We think about beginning and end of life cases—about fetuses, humans in vegetative states, and the afterlife—as well as more exotic cases involving cyborgs, brains in vats, and tele-transporters, and we ask ourselves when, and *how*, we survive. Anti-criterialists already deny some of this. Fine. But if they are willing to go so far as to assert that Sam possibly fails to survive *even when he hardly changes at all*, then I start to lose my grip on what we're talking about. Or consider a case where Sam and the whole rest of the world don't change *at all*—not one iota—from *t* to *t*\*. If one says it's possible that Sam and Sam\* are not the same person in *that* case, as anti-criterialists have to say, then I'm really at sea. At that point, why should we be confident that we are tracking any regularities, or robust generalizations, when we reason about personal identity? This whole practice, of which anti-criterialism is a part, begins to look suspect. Thus, in this way, anti-criterialism is *self-undermining*: If you accept it, then you end up with reasons to reject it. But now I have at least some faith in the personal identity debate, and I have some faith that our reasoning about our persistence through time does not float so freely from the way things are. Insofar as you share my faith, this gives you yet another reason to think that anti-criterialists are stuck with a false result. Thus, it gives you another reason to accept (2').

There is one final reason to accept (2') to which I'll now turn. It is a *new* reason to accept (2')—it hasn't been used against anti-criterialism at all before—and it is a reason that I believe is irresistible.<sup>13</sup> I believe that it is irresistible because the key premise upon which it is based is beyond doubt, epistemically. It is *certain*. The evidence that I am talking about is *direct introspective awareness* of one's persistence through time.

Start by shifting back to *your own* case. This time, focus on a very short period of time. Focus on the few milliseconds it takes you think a short thought—the thought, 'cows moo', say. Go ahead: Think that thought, and focus on it.

<sup>13</sup> Elsewhere I have appealed to certain elements of the argument to follow to argue against various theories of personal identity (see Duncan 2015). But these elements have never been used, by me or anyone else, to argue against anti-criterialism.

Now notice three things. First, you can be certain that your thought exists and that you are its thinker. You could be wrong about all sorts of things, but not that. So right now you can be certain that you are thinking, and thus, that you exist. So you exist. Second: Thinking takes time. Some thoughts are short. But even ‘cows moo’ takes at least a few milliseconds to think. So the fact that you can be certain that your thought exists and that you are its thinker actually implies that you can be certain that you *persist*. So you persist. Specifically, you persist for as long as it takes to think ‘cows moo’. Third: This very same evidence is available to you or anyone else who is the subject of any brief, uninterrupted phenomenal experience. So, whenever anyone is the subject of such an experience, one can be certain that one persists.

These three claims seem undeniable. Indeed, I think they are. And yet, given (1), anti-criterialists are committed to it being possible that, in the present case, you fail to persist. So anti-criterialists are committed to a false result. In any case in which qualitatively identical phenomenal experiences and attention are distributed in exactly the same way as when you thought ‘cows moo’, you can be certain that you thought ‘cows moo’ and thus persisted through the time it took to think it. Thus, contra anti-criterialism, there is no possible case like this where you fail to persist. So anti-criterialism yields a false result. Thus, (2′) is true.

Keep in mind that, in criticizing anti-criterialism here, I am not myself offering a criterion of personal persistence—I am not, for example, suggesting that you persist if and only if you are thinking ‘cows moo’ (or some other thought). Rather, I am simply stating that, in any of the possible cases mentioned above, you can know—indeed, you can be certain—that you persist. In which case you persist. But, again, given (1), anti-criterialists are committed to the result that you fail to persist in some such case. Which is false.

In order to avoid this result, anti-criterialists must say that since you possibly don’t exist for the whole time it takes to think ‘cows moo’, it could be that it’s not really *you* who thinks ‘cows moo’. This is a very bad option to be left with. To see this, assume for a moment that ‘you’ refers to the person present at the end of the thought. Anti-criterialists have to say that there is some possible case *exactly* qualitatively like you thinking ‘cows moo’, in which it seems to you as if you are thinking ‘cows moo’, but in which you aren’t thinking that thought. But that’s false. In each case, you’re not mistaken—if things seems to you exactly as they do right now (or as they did when you thought ‘cows moo’), then you are indeed thinking ‘cows moo’.

This point gains even more force when we consider the specific kind of mistake that you would have to be making here. In the case we are considering, you wouldn’t necessarily be wrong to believe that ‘cows moo’ was thought. It was. Or, at least, each part of it was. If anti-criterialism is true, one person thought part of ‘cows moo’, and another person thought the other part of it. So the mistake wouldn’t be in believing that ‘cows moo’ was thought. Rather, it would be in believing that *you* thought it. But this is not a mistake that you can make. You are, as they (i.e., philosophers) say, *immune* from such errors.<sup>14</sup> If you know that a thought is thought,

<sup>14</sup> See, for example, Shoemaker (1968), O’Brien (2007), Evans (2001), Howell (2006), and Gertler (2011, pp. 215–217). I take the claim that we are immune from the sort of errors mentioned above to be uncontroversial. It is controversial which cases are to count. But the case that I have described should be safe by anyone’s standards. And even if it is not—if, for example, you think that ‘cows moo’ is *too long*

and you judge on the basis of the way things seem to you that *you* are thinking it, then you are right, you *are* thinking it. So the notion that you could be wrong to believe that you are thinking ‘cows moo’ simply doesn’t gain any traction. Anti-criterialists don’t have a leg to stand on. (2’) is undeniable.

Notice that this argument doesn’t rely on intuitions, and it doesn’t appeal to defeasible sensory evidence. It is based on direct introspective awareness of your existence in and through time. Intuitions can be denied. Senses can be mistaken. But the evidence that I’ve adduced is beyond doubt. It allows you to be certain of (2’).

And anti-criterialists should appreciate the point that we can be certain of our persistence through time in this way. In fact, they *do* appreciate it. Anti-criterialists typically assert that we can be directly aware of our persistence through time. Indeed, they claim that this kind of first-personal evidence, not our awareness of empirically observable conditions, is the primary means by which we know that we persist. Butler (1736/2008), for example, says that “consciousness of what is past does thus ascertain our personal identity” (p. 100). Reid (1855/2008) similarly appeals to first-personal evidence (i.e., memory) when he says:

How do you know—what evidence have you—that there is such a permanent self which has a claim to all the thoughts, actions, and feelings which you call yours? To this I answer, that the proper evidence I have of all this is remembrance (p. 110; see also p. 107).

More recently, Madell (1981) complains that, “The fundamental error in nearly everything which has been written [on personal identity] has been the failure to take note of the importance of the first person perspective” (preface to *The Identity of the Self*). Madell then goes on to appeal to first-personal evidence to defend anti-criterialism.

Swinburne (1985) says:

... the continuing existence of a person over a very short period of time is something which can often be experienced by that person. It is something of which we are often aware without knowledge of it depending on our knowledge of anything more ultimate. In that sense the continuing of a person is a datum of experience ... (p. 42).

Swinburne then approvingly cites Foster (1979) as saying that, “It is in the unity of a stream [of consciousness] that we primarily discern the identity of a subject” (p. 176; cited in Swinburne 1985, p. 44).

So anti-criterialists *agree* that we have this direct, first-personal awareness of our persistence through time. Why? They aren’t always explicit on the point. But the answer is plain to see: Because they want to allow that we can know, with some degree of certainty, that we persist through time. They cannot allow that our awareness of the obtaining of empirically observable conditions—the kind of

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Footnote 14 continued

of a thought to be immune from error through misidentification—then feel free to just pick a different, shorter thought. Maybe just think about cows for as quickly as you can—for a few milliseconds, perhaps. It’s doubtful that any thought of which we are aware, or that’s ever been used as an example to illustrate immunity from error, is instantaneous (see Duncan 2015). So some such thought will do.

(sensory) awareness that Shoemaker (2012) says grounds our knowledge of persistence facts—is sufficient evidence of our persistence through time. So they have to allow for another route. First-personal evidence is that route.<sup>15</sup>

So it seems that, just as anti-criterialists have motivational reasons to accept (1) (as I argued in Sect. 2), so too they have reasons to accept the premise that leads to (2′). If anti-criterialists want to allow that we can know of—perhaps even be certain of—our persistence through time, they have to accept that we have strong first-personal evidence of our persistence through time. But if we have such evidence, then in any possible case qualitatively identical to the case in which you think ‘cows moo’—and so in which you have qualitatively identical first-personal evidence—you can know (with certainty) that you persist. So you persist. And yet (1) implies the opposite. For (1) implies that all of the physical and/or mental conditions upon which your first-personal evidence (i.e., your experiences) depends could possibly obtain without you persisting. So, given that anti-criterialists agree that we can know, via first-personal evidence, that we persist through time, they should agree that (1) yields false results. And that’s precisely what (2′) says. So anti-criterialists should agree with (2′).

#### 4 Where the Path Leads

In Sect. 2, I argued for (1). That is, I argued that anti-criterialists are committed to there being no informative sufficient conditions for personal persistence. I also showed that anti-criterialists should *agree* with (1). In Sect. 3, I argued for (2′). That is, I argued that commitment to there being no informative sufficient conditions for personal persistence commits one to false results. I also showed that anti-criterialists should *agree* with (2′).

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<sup>15</sup> But doesn’t this first-personal evidence presuppose personal identity in that it presupposes whose persistence it is evidence of? And doesn’t that support anti-criterialism? No. First of all, remember that the anti-criterialist charge is that various alleged *criteria* of personal persistence are uninformative due to presupposing personal identity. But, again, I’m not giving a criterion of personal persistence here—I’m not saying first-personal evidence is what anyone’s persistence *consists in*. It’s just *evidence* for persistence, which anti-criterialists themselves are careful to distinguish from criteria of persistence (see Swinburne 1985; Merricks 1998; also see fn. 1 and 4). So the anti-criterialist charge that various alleged criteria are uninformative isn’t relevant here.

Furthermore, there’s no obvious reason why this first-personal evidence couldn’t be construed without presupposing anyone’s identity. Consider an analogy: A picture of you dated to 1990 is good evidence that you existed in 1990 (though of course it’s not *itself* what your persistence consists in). And, although I did just describe it as a picture of *you*, if, for whatever reason, I just wanted to focus on this picture as mere *evidence* of your persistence, and didn’t want to beg the question against someone who claimed that it’s not actually a picture of you, I could construe the evidence without *presupposing* that it is of you by referring only to the purely qualitative features (e.g., hair color, face shape, etc.) that make it *appear* like a picture of you. Likewise, the first-personal evidence that I am talking about can be construed purely in terms of qualitative features of the experiences that constitute it. It’s just that, unlike pictures, it is indubitable evidence of your persistence and it is available in any possible situation qualitatively just like the one described above. So this evidence, while again not a criterion of personal persistence itself, gives us reason to believe that you persist in any possible case qualitatively just like the one described above. Which, given (1), is inconsistent with anti-criterialism.

That's bad news for anti-criterialists. For, together, (1) and (2') entail that anti-criterialists are committed to a false result. False commitments make for false theories. So (1) and (2') entail that anti-criterialism is false.

But there's more. I believe (1) and (2'). So I believe that anti-criterialism is false. And I think you should agree. That's not surprising. But this is: *Anti-criterialists should agree!* Those who are moved by reasons to accept anti-criterialism should follow those reasons a bit further and see that they lead to a dead end. So any such philosopher—even those who have long trod the path of anti-criterialism—ought to change course.

Anti-criterialism occupies a unique position in the personal identity debate. It appears to offer a way out of the befuddling labyrinth of theories, arguments, and puzzle cases presented by criterialists. But, as it turns out, anti-criterialism is not a viable route. It's not a safe exit. Perhaps in this debate, there is no easy way out.

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